5615-2

MARCH 1990

OREGON LABOR TRENDS

State of Oregon • Employment Division • Department of Human Resources

INDICATORS

UNEMPLOYMENT RATE

Oregon (Seas. Adj.)

Feb.	1990	5.1
Jan.	1990	4.9
Feb.	1989	5.8

United States (Seas. Adj.)

Feb.	1990	5.3
Jan.	1990	5.3
Feb.	1989	5.2

WAGE AND SALARY EMPLOYMENT INDEX

Oregon (1977=100)

Feb.	1990	132.3
Jan.	1990	132.1
Dec.	1989	130.5
Nov.	1989	130.2
Oct.	1989	129.9

PRODUCTION WORKER AVERAGE HOURLY EARNINGS

Oregon

Jan.	1990	$11.06
Dec.	1989	$11.02
Jan.	1989	$10.74

PRODUCTION WORKER AVERAGE WEEKLY HOURS

Oregon

Jan.	1990	38.6
Dec.	1989	40.0
Jan.	1989	38.6

CONSUMER PRICE INDEX (CPI)

1982-84=100
ALL URBAN CONSUMERS

Portland-Vancouver	
July-Dec. 1989	121.6
Yearly change	4.9%
Annual Average 1989	120.4
Yearly change	5.0%
United States	
Feb. 1990	128.0
Yearly change	5.3%
Annual Average 1989	124.0
Yearly change	4.8%

Portland Hotline 326-4132

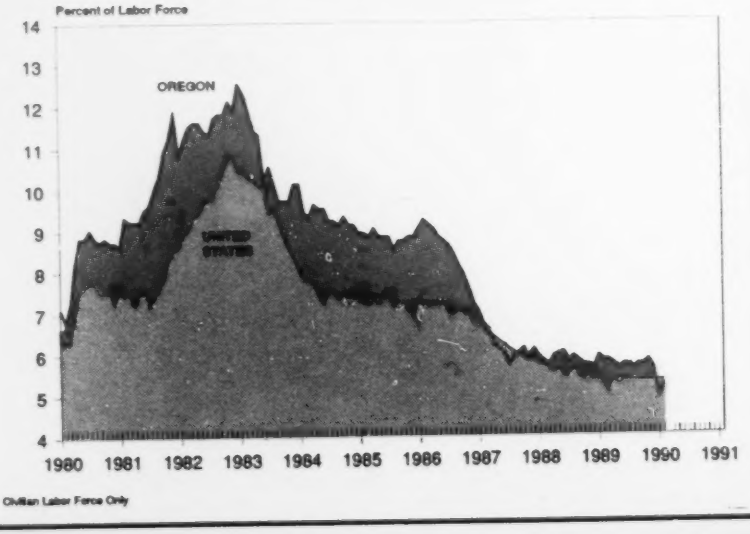
FEBRUARY FINDS CONVERGENCE ELUSIVE AS EVER

Gary Sincick

Not so very long ago, a great commotion was caused by an astronomical phenomenon known as the Harmonic Convergence, in which various heavenly bodies were, for a brief time, in rare alignment with one another. This event was heralded by a certain segment of the population as having many wondrous and beneficial effects, and was seen as a general cause for celebration. A similar level of excitement might be observed in another sub-group (namely, economists) over a different sort of convergence, that of economic indicators. Such an "Economic Convergence" would result in certain knowledge of the exact state of the economy and the direction it was headed. Unfortunately, short-term economic trends (and their subsequent interpretations) tend to be far more capricious than the forces governing celestial motion.

Nationally, the economic news is good or bad, depending on where you look. Despite the stalwart efforts of the Federal Reserve to curb inflation without stalling the economy, the consumer price index leapt up by a frightening 1.1% in January. Much of this increase, however, was due to the rapid rise in heating oil and food prices brought on by a vicious cold snap in much of the Midwest. Although the February CPI data were not yet available at the time of this writing, wholesale prices were reported unchanged, an encouraging sign that the CPI may also show improvement. An in-depth look at the CPI and how it is determined is contained in this month's **Oregon Labor Trends**.

SEASONALLY ADJUSTED UNEMPLOYMENT RATES
OREGON AND THE UNITED STATES



OREGON RESIDENT LABOR FORCE (BY PLACE OF RESIDENCE)

	FEB.1/ 1990	JAN.2/ 1990	FEB. 1989	CHANGE FROM JAN. 1990	CHANGE FROM FEB. 1989
CIVILIAN LABOR FORCE 3/	1,446,200	1,460,800	1,468,500	- 14,600	- 22,300
UNEMPLOYMENT	87,300	85,200	98,200	2,100	- 10,900
PERCENT OF LABOR FORCE	6.0	5.8	6.7	XXX	XXX
SEASONALLY ADJUSTED PERCENT	5.1	4.9	5.8	XXX	XXX
TOTAL EMPLOYMENT 4/	1,358,900	1,375,600	1,370,300	- 16,700	- 11,400

1/ Preliminary
2/ Revised
3/ Includes employed and unemployed individuals 16 years and older, adjusted for multiple job-holding and commuting.
4/ Includes nonagricultural wage and salary, self-employed, unpaid family workers, domestics, farm workers, and labor disputants.
5/ Includes full- and part-time nonfarm wage and salary workers in pay periods including the 12th of the month. Proprietors, self-employed, private household workers and armed forces excluded. Note: These data are estimated in cooperation with the U.S. Bureau of Labor Statistics and the Employment and Training Administration. All data are based on the 1987 Standard Industrial Classification (SIC) codes.
6/ Total nonagricultural wage and salary employment, seasonally adjusted, and indexed to 1977. Data on the earlier index (1972 = 100) can be converted to the 1977 base period by multiplying by a factor of 0.8264, the ratio between 1972's annual average employment (774,300) and that of 1977 (936,900).
7/ Goods producing industries include manufacturing, mining, and construction.
8/ Service producing industries include transportation, communications, and utilities; trade; finance, insurance, and real estate; services; and government.
9/ Series break. Data for 1988 and thereafter are not comparable to those for 1987 and before.
10/ Employees involved in labor disputes are not included in wage and salary employment counts.

In what would appear to be good news, the December merchandise trade deficit fell to $7.2 billion, the lowest level since comparable records have been kept. There is concern, though, that the drop in imports (-$2.9 billion) may be indicative of a weakening domestic economy. This concern is corroborated by January's decline in durable goods orders, which dropped by 10.5%.

The national unemployment rate in February continued to hold steady at 5.3% for the ninth straight month, leaving few people unconvinced that the trend is flat. Job growth was primarily concentrated in the services-producing sector. Although 90,000 factory jobs were added, these were mostly workers returning from temporary layoffs.

Oregon's employment statistics, while giving no signs of the aforementioned convergence, did show indications of a relatively slack month. The state's unemployment rate rose to 5.1%, up 0.2 from January. Alert readers may wonder how last month's published unemployment rate of 5.2% could rise 0.2 to 5.1%. The answer is that last month's rate has been revised downward to 4.9% as the result of benchmarking. Monthly statewide labor force statistics have been revised for both 1988 and 1989, and are included in this month's issue. Details of the annual benchmark revisions of labor force and unemployment data will be covered in an upcoming **Oregon Labor Trends** article.

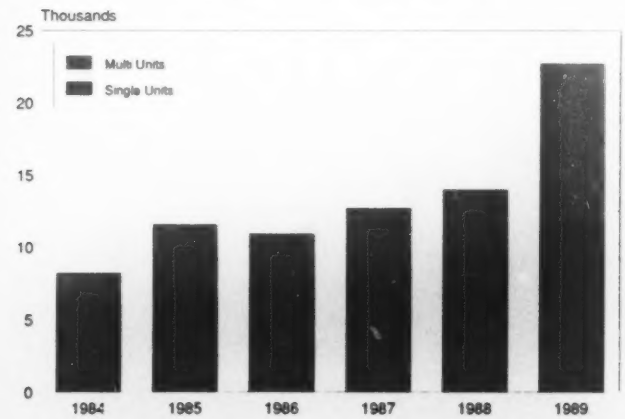
. . .unemployment in February has not been lower since 1978. . .

Unemployment insurance claims increased by 12% over January's level, for a total of 40,314. The increase in claimants helped to push up the total number of unemployed Oregonians to 87,300. Even given the increase, however, unemployment in February has not been lower since 1978; this is even more impressive considering that the labor force has grown by nearly 300,000 since then.

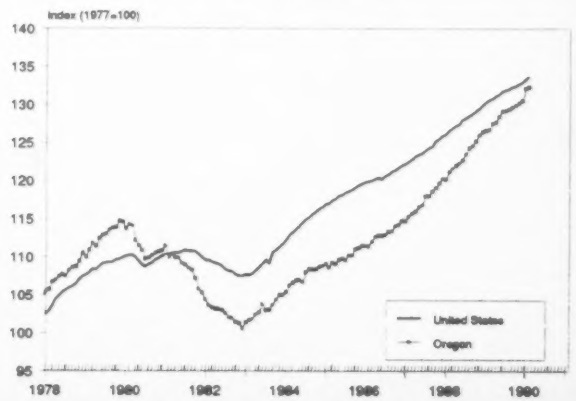
. . .timber supply problems for the forest products industry are likely to worsen.

Despite the rise in the unemployment rate, nonfarm payroll jobs increased modestly by 3,800. The bulk of this change was seen in nonmanufacturing

OREGON HOUSING PERMITS ISSUED



NONFARM WAGE & SALARY EMPLOYMENT INDEXES
(SEASONALLY ADJUSTED)



OREGON NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT (BY PLACE OF WORK)

INDUSTRY	FEB.1/ 1990	JAN.2/ 1990	FEB. 1989	CHANGE FROM JAN. 1990	CHANGE FROM FEB. 1989
TOTAL 5/	1,211,800	1,208,000	1,162,000	3,800	49,800
WAGE & SALARY EMPLOYMENT INDEX 6/	132.3	132.1	126.7	XXX	XXX
GOODS PRODUCING INDUSTRIES 7/	255,900	257,300	245,700	- 1,400	10,200
SERVICE PRODUCING INDUSTRIES 8/	955,900	950,700	916,300	5,200	39,600
TOTAL MANUFACTURING	212,600	213,500	206,500	- 900	6,100
DURABLE GOODS	156,200	158,000	152,200	- 1,800	4,000
LUMBER & WOOD PRODUCTS	64,000	65,900	63,200	- 1,900	800
LOGGING	9,900	10,700	11,500	- 800	- 1,600
SAWMILLS	22,200	22,600	21,300	- 400	900
VENEER & PLYWOOD	14,900	15,800	14,600	- 900	300
MILLWORK & STRUCTURAL WOOD	10,800	10,700	10,100	100	700
MOBILE HOMES	1,900	1,900	1,800	0	100
OTHER WOOD PRODUCTS	4,300	4,200	3,900	100	400
FURNITURE AND FIXTURES	3,000	2,800	2,900	200	100
STONE, CLAY, GLASS & CONCRETE	4,000	4,100	3,900	- 100	100
PRIMARY METALS	11,400	11,300	10,400	100	1,000
BLAST FURNACES, IRON & STEEL 9/	5,800	5,800	5,400	0	400
NONFERROUS METALS 9/	5,600	5,500	5,000	100	600
FABRICATED METALS	11,800	11,700	12,400	100	- 600
FABRICATED STRUCTURAL METALS	4,900	4,800	5,500	100	- 600
OTHER FABRICATED METALS	6,900	6,900	6,900	0	0
MACHINERY	18,000	17,800	17,000	200	1,000
OFFICE & COMPUTING MACHINES	4,800	4,700	4,200	100	600
OTHER MACHINERY	13,200	13,100	12,800	100	400
ELECTRONIC & OTHER ELECTRIC EQUIPMENT 9/	16,600	16,600	14,900	0	1,700
TRANSPORTATION EQUIPMENT	11,600	11,900	11,100	- 300	500
INSTRUMENTS & RELATED PRODUCTS 9/	12,100	12,200	12,600	- 100	- 500
MISCELLANEOUS MANUFACTURING	3,700	3,700	3,800	0	- 100
NONDURABLE GOODS	56,400	55,500	54,300	900	2,100
FOOD & KINDRED PRODUCTS	21,400	20,300	20,100	1,100	1,300
CANNING & PRESERVING	10,800	9,500	9,900	1,300	900
OTHER FOOD PRODUCTS	10,600	10,800	10,200	- 200	400
TEXTILE MILL PRODUCTS	1,700	1,700	1,700	0	0
APPAREL	2,700	2,700	2,600	0	100
PAPER & ALLIED PRODUCTS	9,000	9,100	9,100	- 100	- 100
PRINTING & PUBLISHING	13,700	13,800	13,100	- 100	600
CHEMICALS & ALLIED PRODUCTS	2,200	2,200	2,100	0	100
PETROLEUM & ASPHALT PRODUCTS	400	400	400	0	0
RUBBER & PLASTIC PRODUCTS	4,800	4,800	4,700	0	100
LEATHER PRODUCTS	500	500	500	0	0
TOTAL NONMANUFACTURING	999,200	994,500	955,500	4,700	43,700
MINING & QUARRYING	1,200	1,200	1,100	0	100
CONSTRUCTION	42,100	42,600	38,100	- 500	4,000
BUILDING CONSTRUCTION	11,200	10,800	10,100	400	1,100
HEAVY CONSTRUCTION	4,100	4,800	4,700	- 700	- 600
SPECIAL TRADE CONTRACTORS	26,800	27,000	23,300	- 200	3,500
TRANSPORTATION, COMMUNICATIONS, & UTILITIES	63,600	63,500	61,100	100	2,500
TRANSPORTATION	42,000	42,100	40,100	- 100	1,900
RAILROAD	3,700	3,800	3,900	- 100	- 200
TRUCKING & WAREHOUSING	24,200	24,000	22,900	200	1,300
OTHER TRANSPORTATION	14,100	14,300	13,300	- 200	800
COMMUNICATIONS	12,600	12,500	12,400	100	200
UTILITIES	9,000	8,900	8,600	100	400
TRADE	309,500	312,300	292,800	- 2,800	16,700
WHOLESALE TRADE	80,000	80,300	75,100	- 300	4,900
DURABLE GOODS	46,500	46,800	44,200	- 300	2,300
MACHINERY, EQUIPMENT, & SUPPLIES	11,100	11,000	10,400	100	700
OTHER DURABLE GOODS	35,400	35,800	33,800	- 400	1,600
NONDURABLE GOODS	33,500	33,500	30,900	0	2,600
GROCERIES & RELATED PRODUCTS	13,200	13,200	11,800	0	1,400
OTHER NONDURABLE GOODS	20,300	20,300	19,100	0	1,200
RETAIL TRADE	229,500	232,000	217,700	- 2,500	11,800
BUILDING MATERIALS & GARDEN SUPPLIES	8,300	8,300	7,000	0	1,300
GENERAL MERCHANDISE	29,000	30,900	27,700	- 1,900	1,300
FOOD STORES	40,800	40,600	36,800	200	4,000
AUTO DEALERS & SERVICE STATIONS	28,800	28,600	28,100	200	700
APPAREL & ACCESSORY STORES	9,600	9,900	8,900	- 300	700
FURNITURE & HOME FURNISHINGS	9,800	9,800	9,000	0	800
EATING & DRINKING PLACES	79,700	79,500	77,000	200	2,700
MISCELLANEOUS RETAIL	23,500	24,400	23,200	- 900	300
FINANCE, INSURANCE, & REAL ESTATE	75,500	75,300	73,600	200	1,900
FINANCE	28,000	28,000	27,600	0	400
INSURANCE	22,100	22,000	22,200	100	- 100
REAL ESTATE	25,400	25,300	23,800	100	1,600
SERVICES	284,300	280,000	271,900	4,300	12,400
HOTELS & OTHER LODGING PLACES	17,400	17,100	16,800	300	600
PERSONAL SERVICES	10,900	10,700	11,000	200	- 100
BUSINESS SERVICES	46,900	46,200	44,700	700	2,200
AUTOMOTIVE & MISC. REPAIR SERVICES	14,800	14,900	14,500	- 100	300
MOTION PICTURES & AMUSEMENTS	14,900	13,900	13,600	1,000	1,300
HEALTH SERVICES	84,400	84,200	80,100	200	4,300
LEGAL SERVICES	8,700	8,600	8,600	100	100
PRIVATE EDUCATION	15,100	14,100	15,400	1,000	- 300
SOCIAL SERVICES	25,500	25,500	23,700	0	1,800
ENGINEERING & MANAGEMENT SERVICES	19,600	18,900	18,800	700	800
OTHER SERVICES & NEC	26,100	25,900	24,700	200	1,400
GOVERNMENT	223,000	219,600	216,900	3,400	6,100
FEDERAL GOVERNMENT	31,600	32,200	30,200	- 600	1,400
STATE GOVERNMENT	60,600	59,400	60,200	1,200	400
EDUCATION	26,100	24,900	25,600	1,200	500
OTHER STATE	34,500	34,500	34,600	0	- 100
LOCAL GOVERNMENT	130,800	128,000	126,500	2,800	4,300
EDUCATION	84,100	81,600	81,700	2,500	2,400
OTHER LOCAL	46,700	46,400	44,800	300	1,900
LABOR-MANAGEMENT DISPUTES 10/	600	500	3,800	100	- 3,200

industries. Manufacturing actually had a net loss of 900 jobs, although February is not typically a great month for these industries. The largest drop was seen in lumber and wood products employment which sank by 1,900. While some of this loss is explained by adverse weather conditions and will soon be regained, closures and layoffs in five veneer and plywood mills may represent job losses of a more permanent nature. A recent Forest Service announcement that more old-growth forests may need to be preserved for spotted owl habitat indicates that timber supply problems for the forest products industry are likely to worsen.

Paper and allied products employment held fairly steady at 9,000 (100 less than the month prior) but did not reflect the Georgia-Pacific strike in Toledo, as it occurred after the week of the employment survey. The strike is affecting over 400 workers and the rhetoric of the dispute appears to be far from conciliatory. This may not be the only labor dispute activity seen in the paper industry in 1990; union contracts covering an additional 1,100 paper workers at four Oregon mills will expire this year.

The only manufacturing industry posting large increases to the employment rolls last month was canning and preserving, up by 1,300. This highly seasonal industry typically increases its employment by as much as 100% between its low in January and its peak in August or September.

On the nonmanufacturing side, employment gains were seen in both services (+4,300) and government (+3,400). Many of the additional jobs in services were due to the onset of the much-delayed ski season. The increase in government jobs was caused largely by seasonal increases in education employment. Government employment should soon be showing some rapid, albeit temporary, growth as the 1990 Census gets into full swing.

February snow and ice caused construction employment to dip by 500 to a total of 42,100. While heavy construction and special trades contracting lost a combined total of 900 jobs, building construction seemed undaunted by the winter weather and actually added 400 jobs. February's overall loss notwithstanding, there would seem to be no reason to believe that the construction industry will not continue to perform very well. Construction employment has increased steadily since 1983 and has been especially rapid in the last two years, coinciding with the pace of recovery in Oregon.

The recent strength of the construction industry is evidenced by the number of building permits issued last year. Statewide single- and multi-family permits totaled 22,724, an astounding 62.3% increase over 1988. This rate was the highest of any state in the nation, according to the Oregon Housing Agency. It comes as no surprise that most of these permits were issued for construction in the Portland metro area; in fact, over half were issued for just two counties, Washington and Clackamas.

Although the levels of employment and building permits portend a bright future, the construction industry, like the forest products industry, may soon be facing supply problems of its own. In this case, the supply in question is not timber, but financing. Intended to clamp down on irresponsible lending, the savings and loan bailout bill has restricted the proportion of working capital a thrift institution may lend to a single customer to 15%. The inadvertent effect of the bill is that some legitimate residential developers are having difficulty obtaining financing for their projects. According to a *Daily Journal of Commerce* article, Martin Perlman, president of the National Association of Home Builders, has said that housing starts nationwide "could fall by 60,000 to 100,000 units this year unless the lending restrictions are loosened." It is not yet clear, however, how much the tightening of thrift financing will affect the housing industry in Oregon. □

THE CONSUMER PRICE INDEX - METHODS, USES, AND LIMITATIONS

Bob Wilson

Inflation is currently a hot topic in the news with headlines indicating that some consumer prices are increasing at double-digit rates. At the same time, Fed Chairman Alan Greenspan has announced that the Federal Reserve Board has reduced its 1990 inflation estimate to 4.0 - 4.5 percent from its earlier estimate of 4.5 - 5.0 percent. If news stories touting double-digit price increases are to be believed, how can the overall consumer inflation rate be in the 4 to 5 percent range? To answer this question, let's take a close look at the Consumer Price Index, the most widely used inflation statistic supplied by the U.S. government.

The Consumer Price Index (CPI) is a measure of the average change in prices for a fixed market basket of goods and services purchased by urban consumers. This index is calculated for two different population groups (CPI-U and CPI-W), and for many urban population centers as well as for the U.S. city average. The wage earner index (CPI-W) represents approximately 32 percent of the U.S. population and is comprised solely of urban wage earners and clerical workers. Calculation of this index began over fifty years ago for use in wage negotiations. As the years passed, many new applications for the CPI were developed, thus creating the need for a broader measure of inflation. Introduced in 1978, the CPI-U was developed to meet this need and is now the most commonly used of the two indexes. The CPI-U represents the purchasing patterns of all urban consumers, approximately 80 percent of the U.S. population. Both the CPI-U and CPI-W are released monthly by the Bureau of Labor Statistics (BLS) for the U.S. city average while values for the Portland metro area are available on a semi-annual basis.

CPI CALCULATION METHODOLOGY

Calculation of the Consumer Price Index requires the input of two types of information. It's not enough to simply monitor price changes for a group of consumer products. The purchasing patterns of an "average consumer" in the index population must be determined so that a weighting factor can be assigned to each item in the market basket. It is this weighting process which allows the CPI to estimate the average change in prices for all consumer goods purchased by all urban consumers.

Monitoring price changes for all consumer transactions throughout the U.S. would be an impossible task. Therefore, the CPI is estimated based upon a group of samples. On a monthly basis, selected goods and services are priced at a sample of retail outlets in selected urban areas throughout the nation. Statistical procedures are used to select these samples so that the resulting index is representative of prices for all consumer goods and services in all urban areas.

(con't. on page 9)

State of Oregon
EMPLOYMENT DIVISION
Department of Human Resources

Research and Statistics
March 1989 Benchmark
March 1990

OREGON RESIDENT LABOR FORCE, UNEMPLOYMENT & EMPLOYMENT 1989 1/

	Annual Average 2/	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
CIVILIAN LABOR FORCE	1,475.0	1,461.1	1,468.5	1,463.5	1,481.6	1,472.0	1,504.0	1,511.2	1,487.5	1,460.5	1,464.3	1,466.5	1,459.5
UNEMPLOYMENT	84.0	99.2	98.2	93.8	86.9	80.9	84.3	84.6	77.7	74.4	73.1	78.2	76.8
Percent of Labor Force	5.7	6.8	6.7	6.4	5.9	5.5	5.6	5.6	5.2	5.1	5.0	5.3	5.3
Seasonally Adjusted Percent	5.7	5.9	5.8	5.8	5.7	5.6	5.7	5.7	5.6	5.7	5.7	5.8	5.6
TOTAL EMPLOYMENT	1,391.0	1,361.9	1,370.3	1,369.7	1,394.7	1,391.1	1,419.7	1,426.6	1,409.8	1,386.1	1,391.2	1,388.3	1,382.7

OREGON NONAGRICULTURAL WAGE & SALARY EMPLOYMENT 1989 3/

TOTAL WAGE & SALARY	1,206.6	1,159.5	1,162.0	1,176.4	1,187.2	1,205.4	1,227.4	1,209.1	1,218.9	1,231.0	1,237.4	1,235.2	1,230.1
Wage & Salary Emp, Index (1977=100) 4/	128.8	126.6	126.7	127.5	127.7	128.4	129.1	129.2	129.4	129.6	129.9	130.2	130.5
GOODS PRODUCING 5/	263.8	248.6	245.7	250.5	254.3	259.6	270.4	275.2	280.9	278.2	273.1	266.0	262.7
SERVICE PRODUCING 6/	942.9	910.9	916.3	925.9	932.9	945.8	957.0	933.9	938.0	952.8	964.3	969.2	967.4
MANUFACTURING, TOTAL	217.2	209.0	206.5	208.5	209.7	212.7	221.6	225.4	229.7	226.9	222.4	217.5	216.2
Durable Goods	158.5	156.3	152.2	154.5	154.3	157.0	162.3	163.8	163.1	162.0	158.9	158.2	159.1
Lumber & Wood Products	66.9	67.5	63.2	63.6	63.7	64.8	69.6	70.4	69.6	68.8	67.9	67.5	66.7
Logging	12.1	11.8	11.5	11.1	10.9	11.8	12.7	13.1	13.0	12.9	12.7	12.2	11.4
Sawmills	22.7	22.2	21.3	21.6	22.1	22.3	23.6	23.9	23.6	23.2	22.9	22.9	22.8
Veneer & Plywood	15.7	17.3	14.6	14.7	14.6	14.4	16.4	16.4	16.0	15.9	15.8	15.8	15.9
Millwork & Structural Wood	10.4	10.1	10.1	10.4	10.3	10.4	10.7	10.7	10.7	10.5	10.4	10.4	10.5
Mobile Homes	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.9	1.9
Other Wood Products	4.2	4.3	3.9	4.0	4.0	4.1	4.4	4.4	4.4	4.4	4.3	4.3	4.2
Furniture & Fixtures	3.0	2.9	2.9	3.0	2.9	3.0	3.0	3.0	3.1	3.1	3.1	3.0	2.9
Stone, Clay, Glass, & Concrete	4.2	4.0	3.9	4.0	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.3	4.2
Primary Metals	11.0	10.4	10.4	10.6	10.7	10.8	11.0	11.2	11.3	11.2	11.3	11.3	11.3
Blast Furnaces, Iron & Steel 7/	5.6	5.3	5.4	5.5	5.5	5.5	5.6	5.7	5.9	5.7	5.8	5.8	5.8
Nonferrous Metals 7/	5.3	5.1	5.0	5.1	5.2	5.3	5.4	5.5	5.4	5.5	5.5	5.5	5.5
Fabricated Metals	12.3	12.2	12.4	12.7	12.7	12.5	12.4	12.4	12.3	12.1	12.1	12.0	11.8
Fabricated Structural Metals	5.3	5.3	5.5	5.7	5.7	5.4	5.2	5.2	5.2	5.0	5.0	5.0	4.9
Other Fabricated Metals	7.0	6.9	6.9	7.0	7.0	7.1	7.2	7.2	7.1	7.1	7.1	7.0	6.9
Machinery	17.6	16.9	17.0	17.1	17.4	17.7	17.8	17.9	18.0	17.9	17.7	17.6	17.8
Office & Computing Machines	4.5	4.2	4.2	4.2	4.3	4.4	4.5	4.6	4.8	4.8	4.8	4.6	4.7
Other Machinery	13.1	12.7	12.8	12.9	13.1	13.3	13.3	13.3	13.2	13.1	12.9	13.0	13.1
Electronic & Other Elect. Equip 7/	15.6	15.1	14.9	15.1	15.0	15.3	15.5	15.7	16.0	16.0	16.1	16.3	16.4
Transportation Equipment	11.4	11.0	11.1	11.8	11.2	12.0	11.9	12.2	11.9	12.1	10.0	10.0	12.1
Instruments & Related Products 7/	12.5	12.6	12.6	12.7	12.7	12.7	12.7	12.7	12.5	12.4	12.3	12.2	12.2
Miscellaneous Manufacturing	3.9	3.7	3.8	3.9	3.9	3.9	4.0	3.9	4.0	4.0	4.0	4.0	3.7
Nondurable Goods	58.7	52.7	54.3	54.0	55.4	55.7	59.3	61.6	66.6	64.9	63.5	59.3	57.1
Food & Kindred Products	23.6	19.4	20.1	19.5	20.5	20.7	23.7	26.1	30.8	29.3	28.2	23.9	21.5
Canning & Preserving	12.9	9.2	9.9	9.4	10.3	10.1	12.9	15.1	19.8	18.4	16.8	12.4	10.3
Other Food Products	10.8	10.2	10.2	10.1	10.2	10.6	10.8	11.0	11.0	10.9	11.4	11.5	11.2
Textile Mill Products	1.8	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Apparel	2.7	2.6	2.6	2.7	2.7	2.6	2.7	2.6	2.7	2.7	2.7	2.7	2.8
Paper & Allied Products	9.1	8.4	9.1	9.0	9.0	9.1	9.3	9.4	9.3	9.2	9.0	9.1	9.1
Printing & Publishing	13.5	13.1	13.1	13.3	13.4	13.4	13.6	13.5	13.7	13.7	13.7	13.9	14.0
Chemicals & Allied Products	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.2
Petroleum & Asphalt Products	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
Rubber & Plastic Products	4.9	4.6	4.7	4.8	4.9	4.9	5.0	5.0	5.0	4.9	4.9	4.8	4.8
Leather Products	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5
NONMANUFACTURING, TOTAL	989.5	950.5	955.5	967.9	977.5	992.7	1,005.8	983.7	989.2	1,004.1	1,015.0	1,017.7	1,013.9
Mining & Quarrying	1.4	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.6	1.6	1.5	1.4	1.4
Construction	45.2	38.5	38.1	40.8	43.3	45.5	47.3	48.2	49.6	49.7	49.2	47.1	45.1
Building Construction	11.4	9.8	10.1	11.1	11.4	11.8	11.8	11.7	12.3	12.2	12.3	11.7	11.1
Heavy Construction	6.3	5.0	4.7	5.3	6.2	6.9	7.4	7.3	7.2	7.2	6.7	6.1	5.4
Special Trade Contractors	27.5	23.7	23.3	24.4	25.7	26.8	28.1	29.2	30.1	30.3	30.2	29.3	28.6

1989 Continued	Annual Average 2/	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Transport., Comm., & Utilities	62.9	61.0	61.1	61.1	61.8	62.4	63.2	62.9	63.2	64.2	63.9	64.2	65.2
Transportation	41.6	40.1	40.1	40.0	40.6	41.1	41.7	41.4	41.8	42.9	42.7	42.9	43.8
Railroad Transportation	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.8
Trucking & Warehousing	24.0	23.0	22.9	22.8	23.0	23.4	24.0	24.3	24.5	24.8	24.6	24.9	25.7
Other Transportation	13.7	13.2	13.3	13.3	13.7	13.8	13.8	13.2	13.4	14.2	14.2	14.1	14.3
Communications	12.5	12.4	12.4	12.4	12.4	12.4	12.5	12.6	12.6	12.6	12.5	12.5	12.5
Utilities	8.8	8.5	8.6	8.7	8.8	8.9	9.0	8.9	8.8	8.7	8.7	8.8	8.9
Wholesale & Retail Trade	309.6	294.5	292.8	295.9	299.1	305.1	311.0	313.3	316.2	319.4	319.2	323.9	324.8
Wholesale Trade	78.2	74.5	75.1	76.0	76.0	76.7	78.0	78.9	80.0	81.0	80.8	80.6	80.5
Durable Goods	45.7	44.0	44.2	44.7	44.7	45.2	46.0	46.5	46.6	46.4	46.5	46.8	46.9
Machinery, Equipment, & Sup.	10.8	10.4	10.4	10.5	10.7	10.8	11.0	11.0	11.0	10.9	10.9	10.9	11.0
Other Durable Goods	34.9	33.6	33.8	34.2	34.0	34.4	35.0	35.5	35.6	35.5	35.6	35.9	35.9
Nondurable Goods	32.5	30.5	30.9	31.3	31.3	31.5	32.0	32.4	33.4	34.6	34.3	33.8	33.6
Groceries & Related Products	12.5	11.7	11.8	11.8	11.6	11.6	11.7	11.9	13.1	14.2	14.0	13.5	13.3
Other Nondurable Goods	20.0	18.8	19.1	19.5	19.7	19.9	20.3	20.5	20.3	20.4	20.3	20.3	20.3
Retail Trade	231.4	220.0	217.7	219.9	223.1	228.4	233.0	234.4	236.2	238.4	238.4	243.3	244.3
Building Materials & Garden Sup.	8.1	6.9	7.0	7.4	7.8	8.1	8.4	8.6	8.7	8.7	8.5	8.4	8.5
General Merchandise Stores	29.6	29.3	27.7	27.3	27.4	27.7	28.2	28.8	29.0	30.0	31.2	33.8	34.6
Food Stores	39.4	37.1	36.8	37.2	37.9	39.6	40.0	40.5	40.7	40.4	40.6	40.8	41.2
Auto Dealers & Service Stations	28.9	27.8	28.1	28.3	28.8	29.1	29.3	29.6	29.3	29.4	29.3	29.2	28.9
Apparel & Accessory Stores	9.8	9.4	8.9	8.9	8.9	9.1	9.7	10.0	10.2	10.0	9.8	10.9	11.2
Furniture & Home Furnishings	9.2	9.0	9.0	9.0	9.0	9.0	9.1	8.9	9.1	9.5	9.4	9.8	10.1
Eating & Drinking Places	82.3	77.0	77.0	78.5	80.2	82.3	84.7	85.1	85.5	86.3	84.4	83.7	82.4
Miscellaneous Retail	24.2	23.5	23.2	23.3	23.1	23.5	23.6	22.9	23.7	24.1	25.2	26.7	27.4
Finance, Insurance, and Real Estate	75.3	73.1	73.6	74.3	74.7	75.5	76.5	76.8	76.8	76.0	75.7	75.5	75.4
Finance	27.9	27.6	27.6	27.8	27.7	27.8	28.0	28.1	28.2	28.0	27.9	28.1	28.0
Insurance	22.2	22.1	22.2	22.2	22.2	22.3	22.5	22.4	22.4	22.2	22.0	22.0	22.0
Real Estate	25.2	23.4	23.8	24.3	24.8	25.4	26.0	26.3	26.2	25.8	25.8	25.4	25.4
Services	279.9	268.0	271.9	275.7	278.7	280.8	283.2	282.8	284.1	285.9	284.4	282.7	281.1
Hotels & Other Lodging Places	18.4	16.5	16.8	17.2	18.0	18.4	19.7	20.1	20.2	19.3	18.7	18.2	17.7
Personal Services	10.9	10.7	11.0	11.2	11.1	11.0	11.0	10.9	10.8	10.9	10.7	10.6	10.7
Business Services	46.7	43.8	44.7	45.3	46.2	47.3	48.1	47.4	48.0	48.9	47.9	46.9	45.6
Automotive & Misc. Repair Services	15.2	14.4	14.5	14.7	15.1	15.2	15.4	15.7	15.7	15.5	15.4	15.3	15.2
Motion Pictures & Amusements	14.1	13.5	13.6	14.0	14.2	14.5	14.6	14.5	14.5	14.5	13.7	13.3	13.7
Health Services	82.1	79.7	80.1	80.9	80.8	81.2	82.2	82.8	83.3	83.3	83.2	83.6	84.1
Legal Services	8.7	8.5	8.6	8.6	8.6	8.7	8.9	8.8	8.7	8.7	8.6	8.6	8.6
Private Education	14.3	14.6	15.4	15.4	15.5	15.1	12.5	11.7	11.6	14.3	15.2	15.2	14.6
Social Services	24.4	23.5	23.7	23.9	24.1	24.3	24.5	24.0	24.1	24.9	25.0	25.1	25.5
Engineering & Management Services	19.0	18.2	18.8	19.3	19.4	19.0	19.0	18.8	19.0	18.7	19.1	19.2	19.1
Other Services & NEC	26.4	24.6	24.7	25.2	25.7	26.1	27.3	28.1	28.2	26.9	26.9	26.7	26.3
Government	215.2	214.3	216.9	218.9	218.6	222.0	223.1	198.1	197.7	207.3	221.1	222.9	220.9
Federal Government	32.2	30.9	30.2	30.2	31.3	32.1	33.2	33.5	33.5	33.6	32.9	32.4	32.9
State Government	59.2	59.0	60.2	60.7	60.1	60.5	61.7	56.4	56.6	55.4	59.9	60.1	59.6
Education	24.2	24.5	25.6	25.8	25.4	25.7	25.8	20.5	20.1	20.1	25.3	25.8	25.5
Other State	35.0	34.5	34.6	34.9	34.7	34.8	35.9	35.9	36.5	35.3	34.6	34.3	34.1
Local Government	123.7	124.4	126.5	128.0	127.2	129.4	128.2	108.2	107.6	118.3	128.3	130.4	128.4
Education	77.0	79.8	81.7	82.7	81.7	82.4	79.8	59.3	58.4	70.6	81.6	83.9	82.0
Other Local	46.8	44.6	44.8	45.3	45.5	47.0	48.4	48.9	49.2	47.7	46.7	46.5	46.4
LABOR-MANAGEMENT DISPUTES	1.8	1.2	3.8	3.8	3.8	3.6	0.3	0.3	0.3	0.4	2.0	2.0	0.4

1/ Includes employed and unemployed individuals 16 years and older by place of residence. Data are adjusted for multiple job-holding and commuting. Includes nonagriculture wage and salary, self-employed, unpaid family workers, domestics, agriculture and labor disputants. ALL DATA ARE IN THOUSANDS

2/ Sum of monthly estimates divided by 12. Unemployment rate derived by dividing unemployment by civilian labor force.

3/ This nonagricultural wage and salary employment series is based on the 1987 Standard Industrial Classification (SIC) manual. The data are by place of work and persons working multiple jobs are counted more than once. Workers involved in labor-management disputes are excluded from the wage and salary employment totals. ALL DATA ARE IN THOUSANDS

4/ Total nonagricultural wage and salary employment, seasonally adjusted and indexed to 1977. Data on the earlier index (1972 = 100) can be converted to the 1977 base period by multiplying by a factor of .8264, the ratio between 1972's annual average employment (774.3) and that of 1977 (936.9).

5/ Goods producing industries include manufacturing, mining, and construction.

6/ Service producing industries include transportation, communications, & utilities; trade; finance, insurance, & real estate; services; and government.

7/ Series break. Data for 1988 and thereafter are not comparable to those for 1987 and before.

State of Oregon
EMPLOYMENT DIVISION
Department of Human Resources

Research and Statistics
March 1989 Benchmark
March 1990

OREGON RESIDENT LABOR FORCE, UNEMPLOYMENT & EMPLOYMENT 1988 [1]

	Annual Average [2]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
CIVILIAN LABOR FORCE	1,426.0	1,385.4	1,389.9	1,401.3	1,409.0	1,404.4	1,446.0	1,452.0	1,448.1	1,428.5	1,441.8	1,447.7	1,458.0
UNEMPLOYMENT	83.0	95.4	94.2	89.1	84.8	83.3	85.0	84.0	79.9	74.6	72.4	75.6	77.7
Percent of Labor Force	5.8	6.9	6.8	6.4	6.0	5.9	5.9	5.8	5.5	5.2	5.0	5.2	5.3
Seasonally Adjusted Percent	5.8	5.9	5.8	5.7	5.9	6.0	6.0	5.8	5.9	5.8	5.7	5.7	5.6
TOTAL EMPLOYMENT	1,343.0	1,290.0	1,295.7	1,312.2	1,324.2	1,321.1	1,361.0	1,368.0	1,368.2	1,353.9	1,369.4	1,372.1	1,380.3

OREGON NONAGRICULTURAL WAGE & SALARY EMPLOYMENT 1988 [3]

TOTAL WAGE & SALARY	1,156.0	1,101.5	1,112.8	1,123.2	1,135.0	1,148.0	1,167.0	1,154.2	1,169.0	1,182.2	1,192.2	1,194.8	1,191.6
Wage & Salary Emp, Index (1977=100) [4]	123.4	120.2	121.2	121.6	122.0	122.3	122.7	123.5	124.3	124.6	125.2	126.0	126.4
GOODS PRODUCING [5]	255.3	239.4	242.0	242.7	246.9	250.1	256.7	262.7	271.1	268.3	266.8	260.8	256.4
SERVICE PRODUCING [6]	900.6	862.1	870.8	880.5	888.1	897.9	910.3	891.5	897.9	913.9	925.4	934.0	935.2
MANUFACTURING, TOTAL	214.2	205.7	207.3	206.6	208.5	209.9	214.5	218.4	225.3	222.1	220.9	216.9	213.7
Durable Goods	156.5	151.6	152.9	152.5	154.4	155.2	155.8	158.7	160.5	158.9	160.0	159.4	158.2
Lumber & Wood Products	68.8	67.6	68.0	67.3	68.0	68.8	68.6	69.1	70.4	68.9	70.5	69.8	68.8
Logging	12.8	12.3	12.5	11.9	11.9	12.4	13.3	13.8	14.0	11.2	13.7	13.6	12.8
Sawmills	22.6	22.1	22.3	22.4	22.6	22.7	22.3	22.2	22.6	23.4	23.2	22.8	22.8
Veneer & Plywood	17.3	17.7	17.7	17.6	17.8	17.7	16.7	16.4	16.9	17.5	17.2	17.0	16.9
Millwork & Structural Wood	10.1	9.7	9.7	9.6	9.8	10.0	10.4	10.6	10.6	10.5	10.3	10.2	10.2
Mobile Homes	1.6	1.4	1.4	1.4	1.4	1.5	1.6	1.7	1.8	1.8	1.8	1.8	1.8
Other Wood Products	4.4	4.4	4.4	4.4	4.5	4.5	4.3	4.4	4.5	4.5	4.3	4.4	4.3
Furniture & Fixtures	2.9	2.6	2.6	2.7	2.8	2.8	2.9	3.0	3.0	3.0	3.0	3.0	3.0
Stone, Clay, Glass, & Concrete	4.0	3.6	3.6	3.7	3.9	4.0	4.1	4.2	4.3	4.4	4.3	4.2	4.2
Primary Metals	10.2	9.8	9.8	9.9	10.0	10.1	10.3	10.4	10.4	10.4	10.3	10.3	10.3
Blast Furnaces, Iron & Steel [7]	5.1	4.9	4.8	4.9	5.0	5.0	5.1	5.2	5.2	5.2	5.2	5.2	5.3
Nonferrous Metals [7]	5.1	4.9	5.0	5.0	5.0	5.1	5.2	5.2	5.2	5.2	5.1	5.1	5.0
Fabricated Metals	11.2	10.1	10.2	10.4	10.6	10.7	11.0	11.4	11.6	11.6	11.9	12.2	12.4
Fabricated Structural Metals	4.6	4.2	4.2	4.3	4.4	4.4	4.5	4.7	4.7	4.7	4.9	5.2	5.4
Other Fabricated Metals	6.5	5.9	6.0	6.1	6.2	6.3	6.5	6.7	6.9	6.9	7.0	7.0	7.0
Machinery	16.8	16.4	16.7	16.8	16.7	16.5	16.6	16.9	17.0	17.0	17.0	16.8	16.9
Office & Computing Machines	4.1	4.1	4.2	4.2	4.0	3.8	3.8	4.1	4.2	4.2	4.3	4.3	4.3
Other Machinery	12.7	12.3	12.5	12.6	12.7	12.7	12.8	12.8	12.8	12.8	12.7	12.5	12.6
Electronic & Other Elect. Equip [7]	14.1	13.3	13.4	13.4	13.6	13.8	13.9	14.3	14.5	14.6	14.6	14.8	15.0
Transportation Equipment	11.6	11.2	11.5	11.1	11.6	11.5	11.3	12.4	12.3	12.0	11.4	11.4	11.1
Instruments & Related Products [7]	13.2	13.5	13.5	13.5	13.5	13.3	13.2	13.1	13.1	13.1	12.9	12.8	12.6
Miscellaneous Manufacturing	3.8	3.5	3.6	3.7	3.7	3.7	3.9	3.9	3.9	3.9	4.1	4.1	3.9
Nondurable Goods	57.6	54.1	54.4	54.1	54.1	54.7	58.7	59.7	64.8	63.2	60.9	57.5	55.5
Food & Kindred Products	23.7	20.6	20.8	20.3	20.0	21.1	24.2	25.7	30.6	29.0	27.2	23.8	21.5
Canning & Preserving	12.8	9.8	10.2	9.6	9.4	10.3	13.2	14.6	19.5	16.0	15.9	12.6	10.5
Other Food Products	10.9	10.8	10.6	10.7	10.6	10.8	11.0	11.1	11.1	11.0	11.3	11.2	11.0
Textile Mill Products	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.7	1.8	1.7	1.8	1.7	1.7
Apparel	2.6	2.5	2.6	2.5	2.6	2.7	2.7	2.6	2.6	2.7	2.7	2.7	2.7
Paper & Allied Products	8.6	8.8	8.8	8.9	8.8	8.2	8.9	8.6	8.5	8.5	8.2	8.3	8.4
Printing & Publishing	13.2	13.1	13.1	13.1	13.2	13.2	13.2	13.2	13.2	13.3	13.1	13.2	13.4
Chemicals & Allied Products	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2	2.2	2.1	2.1	2.1
Petroleum & Asphalt Products	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.5	0.5
Rubber & Plastic Products	4.6	4.3	4.3	4.4	4.5	4.6	4.6	4.7	4.8	4.8	4.7	4.7	4.7
Leather Products	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NONMANUFACTURING, TOTAL	941.8	895.8	905.5	916.6	926.5	938.1	952.5	935.8	943.7	960.1	971.3	977.9	977.9
Mining & Quarrying	1.3	1.2	1.3	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.2
Construction	39.9	32.5	33.4	34.9	37.1	38.9	40.8	42.9	44.4	44.8	44.5	42.6	41.5
Building Construction	9.6	8.3	8.3	8.5	8.9	9.1	9.5	9.8	10.3	10.5	10.5	10.5	10.4
Heavy Construction	6.2	4.1	4.4	4.8	5.7	6.4	6.8	7.2	7.6	7.7	7.4	6.6	6.0
Special Trade Contractors	24.1	20.1	20.7	21.6	22.5	23.4	24.5	25.9	26.5	26.6	26.6	25.5	25.1

1988 Continued	Annual Average 2/	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Transport., Comm., & Utilities	60.5	58.2	58.6	59.0	59.2	59.7	60.7	60.4	61.3	62.0	61.9	62.1	62.6
Transportation	39.3	37.0	37.4	37.7	37.9	38.4	39.3	39.1	40.0	40.9	40.9	41.1	41.7
Railroad Transportation	3.9	3.8	3.8	3.9	3.9	3.9	3.9	3.9	3.9	4.0	4.0	4.0	3.9
Trucking & Warehousing	22.8	21.2	21.4	21.4	21.7	22.0	22.7	23.1	23.6	23.8	23.7	23.9	24.6
Other Transportation	12.6	12.0	12.2	12.4	12.3	12.5	12.7	12.1	12.5	13.2	13.2	13.2	13.2
Communications	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.4	12.3
Utilities	8.7	8.7	8.7	8.8	8.8	8.8	8.9	8.8	8.8	8.7	8.6	8.6	8.6
Wholesale & Retail Trade	292.4	276.2	275.9	279.2	283.0	287.1	293.2	297.1	299.5	301.9	301.5	305.4	309.0
Wholesale Trade	72.9	68.8	69.5	70.2	71.2	71.6	73.2	74.0	74.5	75.6	75.2	75.3	75.4
Durable Goods	42.7	40.6	40.8	41.1	41.8	42.4	43.0	43.4	43.7	43.9	43.6	43.9	44.2
Machinery, Equipment, & Sup.	10.2	9.6	9.6	9.8	10.0	10.2	10.4	10.4	10.5	10.5	10.3	10.4	10.5
Other Durable Goods	32.5	31.0	31.2	31.3	31.8	32.2	32.6	33.0	33.2	33.4	33.3	33.5	33.7
Nondurable Goods	30.2	28.2	28.7	29.1	29.4	29.2	30.2	30.6	30.8	31.7	31.6	31.4	31.2
Groceries & Related Products	11.6	10.8	10.9	10.9	11.0	10.8	11.3	11.5	11.7	12.7	12.7	12.4	12.1
Other Nondurable Goods	18.6	17.4	17.8	18.2	18.4	18.4	18.9	19.1	19.1	19.0	18.9	19.0	19.1
Retail Trade	219.5	207.4	206.4	209.0	211.8	215.5	220.0	223.1	225.0	226.3	226.3	230.1	233.6
Building Materials & Garden Sup.	7.2	6.5	6.5	6.9	7.1	7.3	7.5	7.5	7.5	7.5	7.3	7.2	7.1
General Merchandise Stores	28.6	28.6	27.1	27.1	26.8	26.9	27.2	28.1	28.5	28.7	29.7	31.5	33.0
Food Stores	36.4	33.8	34.1	34.4	34.4	35.3	36.3	37.4	37.7	38.2	38.6	38.3	38.7
Auto Dealers & Service Stations	28.0	26.4	26.4	26.9	27.7	27.9	28.5	28.5	29.0	29.1	28.8	28.5	28.3
Apparel & Accessory Stores	9.2	8.4	8.1	8.3	8.3	8.5	9.2	10.0	9.7	9.5	9.3	10.1	10.6
Furniture & Home Furnishings	8.3	8.2	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.4	8.6	8.8	9.1
Eating & Drinking Places	78.9	73.6	74.1	75.2	77.4	79.5	81.2	81.7	82.3	82.6	80.4	79.9	79.4
Miscellaneous Retail	22.9	21.9	22.1	22.2	22.0	22.0	21.9	21.7	22.0	22.3	23.6	25.8	27.4
Finance, Insurance, and Real Estate	73.3	71.7	72.0	72.2	72.4	72.8	73.8	73.9	74.5	74.4	73.7	73.5	74.2
Finance	27.6	27.5	27.5	27.6	27.8	27.8	27.9	27.5	27.6	27.6	27.5	27.4	27.6
Insurance	21.9	21.4	21.4	21.5	21.6	21.7	21.9	21.9	22.1	22.1	22.0	22.2	22.4
Real Estate	23.8	22.8	23.1	23.1	23.0	23.3	24.0	24.5	24.8	24.7	24.2	23.9	24.2
Services	263.2	247.0	251.9	255.9	259.4	259.8	263.8	265.3	268.4	270.9	270.9	272.6	273.0
Hotels & Other Lodging Places	17.1	15.0	15.2	15.8	16.4	16.9	18.2	19.0	19.4	18.8	17.4	16.7	16.6
Personal Services	10.4	10.3	10.4	10.5	10.7	10.4	10.2	10.1	10.2	10.3	10.4	10.5	10.6
Business Services	43.0	37.9	39.1	39.8	41.0	41.6	42.8	43.6	45.3	45.6	45.7	47.4	46.3
Automotive & Misc. Repair Services	13.8	12.6	12.9	13.1	13.1	13.4	13.8	14.3	14.5	14.4	14.3	14.3	14.5
Motion Pictures & Amusements	13.1	12.3	12.3	12.7	13.0	12.9	13.4	14.1	14.3	13.4	12.6	12.7	13.7
Health Services	77.7	75.0	75.4	76.1	76.7	76.7	77.6	77.5	78.1	79.1	79.4	79.7	80.5
Legal Services	8.5	8.2	8.2	8.3	8.4	8.4	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Private Education	13.8	13.9	14.8	14.9	14.8	14.2	12.2	10.8	10.7	13.8	15.2	15.5	15.1
Social Services	23.3	22.4	22.9	23.0	23.2	23.4	23.3	23.0	23.1	23.6	23.9	24.0	23.9
Engineering & Management Services	17.3	16.1	17.0	17.3	17.3	16.7	17.1	17.4	17.3	17.4	17.6	17.8	18.0
Other Services & NEC	25.3	23.3	23.7	24.4	24.8	25.2	26.6	26.9	26.9	25.9	25.8	25.4	25.2
Government	211.2	209.0	212.4	214.2	214.1	218.5	218.8	194.8	194.2	204.7	217.4	220.4	216.4
Federal Government	31.7	30.0	29.5	29.6	30.4	31.3	33.0	33.3	33.0	33.0	33.2	31.8	31.8
State Government	58.6	57.7	58.9	59.3	59.3	59.7	60.5	55.8	56.4	55.8	60.2	60.4	59.6
Education	23.9	24.4	25.5	25.7	25.3	25.5	25.6	19.9	19.5	19.8	25.2	25.7	25.2
Other State	34.7	33.3	33.4	33.6	34.0	34.2	34.9	35.9	36.9	36.0	35.0	34.7	34.4
Local Government	121.0	121.3	124.0	125.3	124.4	127.5	125.3	105.7	104.8	115.9	124.0	128.2	125.0
Education	75.4	77.9	80.3	81.0	80.1	81.0	78.6	58.0	57.1	69.5	78.9	81.9	80.1
Other Local	45.6	43.4	43.7	44.3	44.3	46.5	46.7	47.7	47.7	46.4	45.1	46.3	44.9
LABOR-MANAGEMENT DISPUTES	1.4	0.1	0.1	0.2	0.1	0.7	2.4	4.9	3.8	1.1	0.8	1.2	1.2

1/ Includes employed and unemployed individuals 16 years and older by place of residence. Data are adjusted for multiple job-holding and commuting. Includes nonagriculture wage and salary, self-employed, unpaid family workers, domestics, agriculture and labor disputants. ALL DATA ARE IN THOUSANDS

2/ Sum of monthly estimates divided by 12. Unemployment rate derived by dividing unemployment by civilian labor force.

3/ This nonagricultural wage and salary employment series is based on the 1987 Standard Industrial Classification (SIC) manual. The data are by place of work and persons working multiple jobs are counted more than once. Workers involved in labor-management disputes are excluded from the wage and salary employment totals. ALL DATA ARE IN THOUSANDS

4/ Total nonagricultural wage and salary employment, seasonally adjusted and indexed to 1977. Data on the earlier index (1972 = 100) can be converted to the 1977 base period by multiplying by a factor of .8264, the ratio between 1972's annual average employment (774.3) and that of 1977 (936.9).

5/ Goods producing industries include manufacturing, mining, and construction.

6/ Service producing industries include transportation, communications, & utilities; trade; finance, insurance, & real estate; services; and government.

7/ Series break. Data for 1988 and thereafter are not comparable to those for 1987 and before.

TABLE 1

PORTLAND AREA CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS (CPI-U)
(ALL ITEMS, 1982-84 = 100)

YEAR	CPI-U	% CHANGE	YEAR	CPI-U	% CHANGE
1970	38.7		1982	98.0	3.2
1971	39.7	2.6	1983	99.1	1.1
1972	40.8	2.8	1984	102.8	3.7
1973	43.5	6.6	1985	106.7	3.8
1974	48.8	12.2	1986	108.2	1.4
1975	53.5	9.6	1987	110.9	2.5
1976	57.0	6.5	1988	114.7	3.4
1977	61.6	8.1	1989	120.4	5.0
1978	67.8	10.1	1990	*126.3	*4.6
1979	77.0	13.6	1991	*133.2	*5.4
1980	87.2	13.2	1992	*140.9	*5.8
1981	95.0	8.9	1993	*148.1	*5.1

* 1990 thru 1993 are projections from the March 1990 **Oregon Economic and Revenue Forecast** published by the Executive Department, State of Oregon.

According to the **BLS Handbook of Methods**, "Prices for the goods and services used to calculate the index are collected in 91 urban areas throughout the country and from about 21,000 retail and service establishments - supermarkets, department stores, filling stations, hospitals, etc. In addition, data on rents are collected from 40,000 tenants and 20,000 owner-occupied housing units."

The fixed market basket of consumer goods and services consists of seven major expense categories: food and beverages, housing, apparel and upkeep, transportation, medical care, entertainment, and other goods and services. On a monthly basis, the CPI is determined by repricing the many goods and services within each major category and then comparing the total cost with the cost of these goods during a specified base period. In the case of the CPI-U and CPI-W, the current base period is 1982-84 and the base period average cost of the market basket has been arbitrarily set equal to 100.

WEIGHTING FACTORS

Integral to the process of calculating the Consumer Price Index is data obtained from the Consumer Expenditure Survey. This survey estimates the amount spent on each CPI expenditure category by the average consumer in each index population. This information is used to calculate a weighting factor for each CPI category. Since the CPI-U and the CPI-W are composed of different population groups, the weighting factors for each index are calculated separately.

In theory, weighting factors are a simple concept. If the average consumer spends more on housing than food, then more emphasis needs to be placed on price changes in the housing component. This makes intuitive sense but unfortunately the application of this concept becomes more complicated. Each weighting factor in the CPI is comprised of two parts: a fixed purchase quantity (i.e., 2 dozen eggs) multiplied by a variable price. The fixed purchase quantities are updated approximately every ten years to reflect changes which have occurred in consumer purchasing patterns. The most recent revision took place in 1987 and was based on Consumer Expenditure Survey data for the period 1982-84. Price changes on the other hand are monitored on a monthly basis and used to continually update the relative importance of each expenditure item.

Returning to the housing and food example, if food prices increase at a more rapid pace than housing, then the weight given to food goes up while the weight assigned to housing decreases. If the methodology of this concept is confusing, don't worry. The important point is this: in the CPI calculation process, more emphasis is placed on price changes in high expenditure categories. At least for most of us, this means that a 10 percent increase in rent costs would be more disconcerting (and also have a greater impact on the CPI) than if jelly beans were to double in price. Table 2 lists the 1987 weighting factors for both the Portland and the U.S. CPI-U and CPI-W. Note that each expense category is comprised of many components. Housing, for example, is an aggregate of over forty sub-categories of housing expenditures.

CPI INDEX USES

It has been estimated that an increase of one percent in the CPI could result in a $2.8 billion increase in federal expenditures.

As the most widely used inflation statistic provided by the U.S. government, virtually every American is affected by fluctuations in the CPI. According to the Bureau of Labor Statistics, over three million wage earners are covered by collective bargaining contracts which tie wage increases directly to increases in the CPI. In addition, 38 million Social Security beneficiaries, 3 million military and Federal Civil Service retirees and survivors, and approximately 19 million food stamp recipients have their benefits tied to the CPI. It has been estimated that an increase of one percent in the CPI could result in a $2.8 billion increase in federal expenditures. In addition to these government programs, many private con-

TABLE 2

	Portland		U.S.	
Expenditure category	CPI-U	CPI-W	CPI-U	CPI-W
All items	100.000	100.000	100.000	100.000
Food and beverages	18.812	18.212	17.607	19.449
Housing	42.648	41.616	42.479	39.949
Apparel and upkeep	5.893	5.248	6.335	6.358
Transportation	16.034	19.692	17.451	19.411
Medical care	6.158	4.381	5.828	4.947
Entertainment	4.589	4.532	4.368	4.044
Other goods and services	5.866	6.318	5.931	5.840
Commodities	44.629	45.718	45.531	49.440
Services	55.371	54.282	54.469	50.560

tracts (such as rental, child support and alimony agreements) use the CPI to help prevent loss of purchasing power in the face of rising prices. Since 1985, all federal taxpayers have been affected by the CPI as tax rates have been adjusted to prevent inflation caused "bracket creep."

As an economic indicator, changes in the CPI are used by the President, Congress, and the Federal Reserve Board to form both fiscal and monetary policies. Investors, business leaders, and individuals use trends in the CPI to make economic decisions, and the CPI is used to adjust (or deflate) other economic variables to eliminate the effects of inflation. Wages, GNP, and retail sales are all examples of series which are commonly deflated to eliminate changes due to inflation.

Should you contemplate using the CPI in a contract escalation clause, please note that the BLS strongly recommends use of the U.S. city average CPI. While the use of a regional index may sound appealing, these indexes represent a subset of the national index and as such are more volatile and subject to a higher risk of sampling error. For those readers wanting more information, the Bureau of Labor Statistics has published a brief guide entitled, "Using the Consumer Price Index for Escalation" (January 1989), Report 761. Copies are available at no charge from the BLS regional office at:

71 Stevenson St.
P.O. Box 3766
San Francisco, CA 94119-3766
Phone (415) 744-6600

LIMITATIONS OF THE CPI

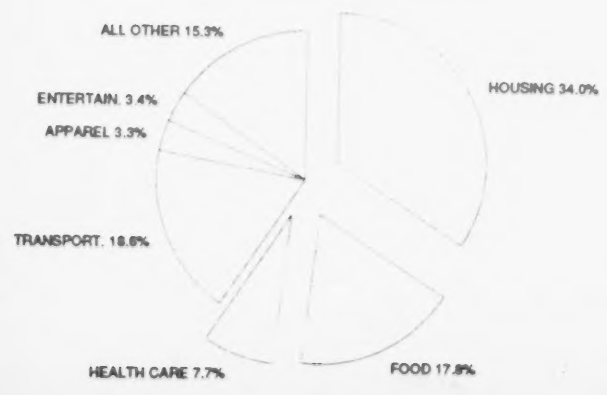
Despite the numerous applications to which the CPI is applied, the BLS admits that the CPI has its limitations. Quoting from the BLS Handbook, 1988 edition, "It should be understood that the CPI may not be applicable to all questions about price movements for all population groups. For example, the indexes are designed to represent the average movement of prices for the U.S. urban population and, thus, are not precisely appropriate for use by nonurban residents. Also, the CPI does not provide data separately for the rate of inflation experienced by any particular subgroup of the population, such as the elderly."

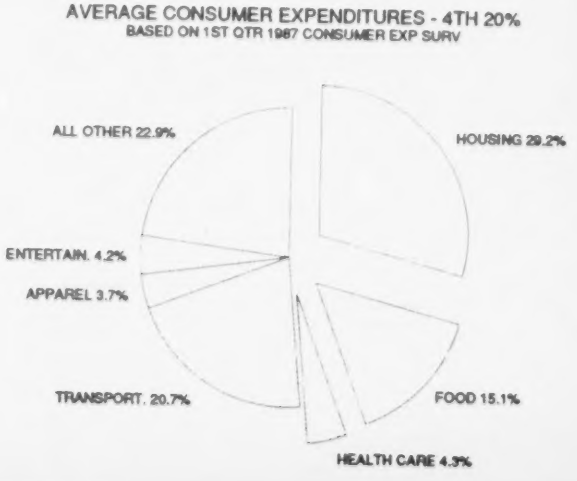
The importance of this point should not be overlooked. If the topic of interest is the average price change experienced by average urban consumers, great! There is no better indicator than the CPI. However, for smaller demographic groups or family units, watch out! These smaller groups may or may not approximate the "average" consumer in the index population. For example, the accompanying pie charts illustrate the difference in spending patterns between U.S. consumers in the 2nd and 4th income quintiles as determined by the 1987 Consumer Expenditure Survey. (Income quintiles are calculated by dividing the frequency distribution of incomes into five equal classes. The 2nd quintile contains lower than average incomes while the 4th quintile contains higher than average incomes.)

These charts show that food, housing, and health care account for 59.3 percent of total expenses for the 2nd quintile group while the same expenses total only 48.6 percent in the 4th quintile group. As expected, the difference is even greater between the 1st and 5th quintiles. It is not surprising then that inflation affects these income groups in different ways depending on which expense categories are driving inflation. Also note that the average consumer unit size is 2.6 people. Expense data for various size consumer units show similar variations in expense patterns as those for the differing income groups. For a larger than average family with a lower than average income, the CPI says very little about the increasing costs experienced by this unit. This family is simply too far from "average" to allow meaningful use of the CPI.

Another limitation of the CPI is common to all statistics based on a sample; there is the possibility that price changes measured in the sample do not reflect the actual price changes within the population. However, this risk is small in comparison to a more worrisome characteristic of the CPI. A fixed market basket makes for easy comparison of price changes over time but it does not reflect consumer buying behavior. When prices increase, consumers will adjust their purchasing patterns, if possible. Where substitutes exist, the consumer may shift to a cheaper product. If there is no substitute, the amount of the commodity purchased may be reduced. Consumers do not shop with "fixed" market baskets.

While the prior limitations affect all components of the CPI, weaknesses may also exist in the way some expense categories are calculated. For example, certain goods and services may be purchased by only a small portion of the population during any survey period (a car for instance). It should be apparent that those buying a car are the only group of consumers experiencing inflation in car prices, yet the CPI averages this increase over all consumers. This tends to dilute the effect of inflation on





those purchasing cars while inaccurately indicating a price increase for non-purchasers.

Medical costs are another problem area. The weighting factor used for health care includes only medical costs paid directly by the consumer, thus excluding payments made by employers for medical insurance programs. While this may be appropriate in a fairly stable price environment, consider what is currently happening in labor contract negotiations. Employers, faced with rapidly increasing insurance premiums, are forcing employees to accept either reduced benefits or lower wage increases, or both. If employees choose to maintain their benefits at the "expense" of a smaller wage increase, they are "paying" for a health care benefit that is not included in the CPI. Considering the fact that health care costs have increased at double the overall inflation rate since at least 1983, this is a significant problem.

. . .the CPI cannot be used to compare living costs between different locations.

Finally, while sales taxes are included in CPI calculations, income taxes are not. As a result, the CPI is unaffected by income tax reform even though tax changes may have significant effects on purchasing power. In addition, it should be noted that the CPI cannot be used to compare living costs between different locations. The CPI measures only price changes, not comparative price levels. Questions of this nature can be referred to a cost-of-living index such as the American Chamber of Commerce Researchers Association (ACCRA) index.

CONCLUSIONS

If you've stayed with me throughout this article, you're now an informed CPI user; aware of some of its applications and limitations. Don't be dismayed by the emphasis placed upon its limitations. The CPI is a powerful tool with many appropriate uses. As with any tool, however, misuse can occur without a thorough understanding of its strengths and weaknesses. In an upcoming **Oregon Labor Trends** article we'll look at both recent and long-term CPI trends. In addition, we'll examine the effects of inflation on Oregon's citizens and look at the ACCRA index. In the meantime, it should be clear that it is indeed possible to have double-digit increases in some expense categories while maintaining a low overall inflation rate. Stay tuned.

Current CPI data for both Portland and the U.S. is available from the Bureau of Labor Statistics Portland Hotline, (503) 326-4132.

□

AVERAGE HOURS AND EARNINGS OF OREGON INDUSTRIAL PRODUCTION WORKERS[1]

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	Jan.[2] 1990	Dec.[3] 1989	Jan. 1989	Jan.[2] 1990	Dec.[3] 1989	Jan. 1989	Jan.[2] 1990	Dec.[3] 1989	Jan. 1989
TOTAL MANUFACTURING[4]	$426.92	$440.80	$414.56	38.6	40.0	38.6	$11.06	$11.02	$10.74
Durable Goods	431.46	446.93	420.20	38.8	40.3	38.8	11.12	11.09	10.83
Lumber & Wood Products	428.85	443.29	417.53	38.6	39.9	38.2	11.11	11.11	10.93
Logging & Sawmills	453.12	474.81	445.33	38.4	39.8	37.9	11.80	11.93	11.75
Veneer & Plywood	425.37	423.36	410.58	38.6	39.2	38.3	11.02	10.80	10.72
Millwork & Structural	377.70	391.64	356.33	39.8	41.4	39.2	9.49	9.46	9.09
Mobile Homes	345.35	348.18	316.03	36.2	37.6	36.2	9.54	9.26	8.73
Other Wood Products	424.54	437.47	404.14	38.7	41.0	38.6	10.97	10.67	10.47
Furniture & Fixtures	322.18	352.26	296.52	35.6	38.0	34.6	9.05	9.27	8.57
Primary Metals	466.38	506.69	503.10	37.4	41.6	42.1	12.47	12.18	11.95
Fabricated Metals	394.20	402.98	380.77	37.4	39.2	38.5	10.54	10.28	9.89
Machinery (Ex Electrical)	444.96	458.59	447.63	39.8	40.8	40.4	11.18	11.24	11.08
Nondurable Goods	412.35	425.13	395.39	37.9	39.4	37.8	10.88	10.79	10.46
Food & Kindred Products	338.98	366.37	326.50	36.1	39.1	35.8	9.39	9.37	9.12
Canning & Preserving	296.48	317.95	276.35	36.2	38.4	34.5	8.19	8.28	8.01
Other Food Products	389.52	426.00	386.80	36.0	40.0	37.3	10.82	10.65	10.37
Textile Mill Products	239.77	270.84	254.10	32.8	36.6	35.0	7.31	7.40	7.26
Apparel	261.02	259.38	245.15	38.9	39.3	37.2	6.71	6.60	6.59
Paper & Allied Products	645.92	660.72	627.13	42.3	43.1	43.4	15.27	15.33	14.45
Printing & Publishing	432.89	435.34	405.61	36.5	36.8	35.8	11.86	11.83	11.33
Construction[4]	542.91	567.67	506.60	35.3	37.2	34.0	15.38	15.26	14.90
Communications & Utilities[5]	597.82	544.32	538.07	42.1	40.5	41.2	14.20	13.44	13.06
Trade[5]	310.25	320.63	310.19	32.9	34.7	33.9	9.43	9.24	9.15
Wholesale Trade	413.65	429.40	417.09	36.9	37.7	38.3	11.21	11.39	10.89
Retail Trade	257.71	267.92	255.82	30.9	33.2	31.7	8.34	8.07	8.07
Banking & Insurance[5]	342.65	341.51	348.30	35.0	36.1	37.9	9.79	9.46	9.19
State & Local Government	403.53	402.65	384.89						

[1]Figures are average gross hours and earnings of full and part-time worked or paid for, including overtime and shift premium pay. Prepared in cooperation with the U.S. Department of Labor. All data are based on the 1972 Standard Industrial Classification (SIC) codes.

[2]Preliminary

[3]Revised

[4]Data for production workers only and exclude administrative, supervisory (above working foremen), technical, sales and office personnel.

[5]Data for nonsupervisory employees only, excluding proprietors and executive personnel. Data for retail trade excludes eating and drinking places.

POLL FINDS AMERICANS NEED CAREER INFORMATION

Nancy Hargis

A 1989 survey conducted by The Gallup Organization found that almost two-thirds of adult Americans (65 percent) would try to get more information about their career options if they could chart their career paths again. Conducted for the National Occupational Information Coordinating Committee (NOICC) and the National Career Development Association (NCDA), "Work in America" focused on a variety of issues concerning jobs, careers and the workplace, including sources of job information, sources of help in finding jobs, job stability, productivity, and job discrimination.

According to the survey, an estimated 12.5 million U.S. adults needed help last year in finding or selecting a job. Forty one percent of working Americans followed a definite plan in mapping out their careers, while 30 percent got started by chance or took the only job available.

A majority of employed adults (56 percent) expect to stay with their current employer for the next three years, while 20 percent expect to leave their current job. About one in ten anticipate being forced out of their current employment, and 12 percent expect to leave the labor force either temporarily or permanently. In 1989, slightly fewer adults expect to remain in their current position over the next three years than they did in a similar 1987 survey.

College graduates (62 percent) and individuals who attended but did not graduate from college (48 percent) are more likely than high school graduates (32 percent) or those who did not graduate from high school (21 percent) to plan their careers. Twenty five percent of those who did not finish high school took the only job available, compared to eight percent of college graduates and individuals who attended college and 14 percent of high school graduates.

Newspapers and magazines are cited by 38 percent as sources of information about jobs. Twenty two percent name career information centers in colleges; 19 percent identify public and private employment services; 13 percent name high school career centers; and 11 percent cite public libraries as sources of information about jobs. Survey findings indicate that Asians are more likely to use college career information centers than other racial/ethnic groups.

More than a quarter of the respondents indicate that they needed assistance in finding information about jobs. Almost one quarter of U.S. adults say information they needed when they were making a decision about jobs was not available. African-Americans, persons 66 and older, and individuals who did not graduate from high school are more likely than others to say that the information they needed when they were making decisions about jobs was not available.

Fifty three percent of working Americans say the public high schools are not doing enough to help students who do not go to college develop the skills they need to find jobs after they graduate from high school. Forty four percent say they believe that the schools are not doing enough to help students choose careers, and 41 percent think that high schools need to do more to help students learn how to use occupational information about salaries and working conditions. The only area where adults believe that schools in their community are devoting about the right amount of attention to the students' education is in preparation for college.

A majority of employed respondents (55 percent) feel that their skills and abilities are being used "very well" in their present or most recent job. Employed respondents living in the South and West are more likely than those living in the East and Midwest to say that their skills and abilities are being used "very well."

For further information on the survey or a detailed report on its findings, contact Nancy Hargis, Oregon Occupational Information Coordinating Committee, 875 Union Street NE, Salem, OR 97311. Telephone (503) 378-8146 or toll-free (800) 237-3710 ext. 8-8146. □

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